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### (54) DIELECTRIC ANTENNA

#### (57) Abstract:

**PROBLEM TO BE SOLVED:** To provide a dielectric antenna which can be controlled in sensitivity in a vertical plane over a wide extent in a horizontal plane.

**SOLUTION:** A dielectric antenna 10 is provided with a monopole antenna 11 and a dielectric element 12 which is provided so as to cover the antenna 11. The monopole antenna 11 is nearly vertically erected on a ground plane 13 and one end of the antenna 11 is connected to a power supply source V, with the other end being opened. The antenna 10 is formed in a platy shape by laminating a plurality of dielectric layers 14a,..., 14n having different dielectric constants upon another so that a dielectric constant gradient in which the dielectric constants become smaller in steps within the range of 20 to 2 from the lowermost dielectric

layer 14a which is the closest to the grounding surface 13 to the uppermost layer 14n can be formed in the antenna 10.

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